

IN THE CLAIMS:

Please cancel Claims 9 and 10 without prejudice to or disclaimer of the subject matter presented therein. Please add new Claim 15 as shown below.

1. (Withdrawn) A kit for immobilizing an organic substance on a substrate, comprising:

a substrate having a surface at least part of which contains aluminum oxide;

and

a binding domain for immobilizing the organic substance on the substrate, having an ability to bind to the aluminum oxide and being coupled with the organic substance, wherein:

the binding domain contains at least a peptide composed of one or more amino acids; and

the organic substance is immobilized on the substrate by means of specific binding of the peptide to the aluminum oxide when the substrate and the binding domain are brought into contact with each other.

2. (Withdrawn) A kit according to claim 1, wherein the organic substance includes a biological substance.

3. (Withdrawn) A kit according to claim 1, further comprising:

a linker comprised of at least one or more amino acids, which is provided at

a coupling portion between the organic substance and the binding domain.

4. (Withdrawn) A kit according to any one of claims 1 to 3,
wherein the peptide containing the amino acid sequence having an ability to bind to the aluminum oxide has any one of at least one amino acid sequence selected from the group consisting of amino acid sequences of SEQ ID NOS: 1 to 32, an altered amino acid sequence obtained such that the amino acid sequence is subject to a deletion, substitution, or addition of one or more amino acids, and a complex amino acid sequence containing two or more of the amino acid sequences, and a repetitive sequence of the amino acid sequences,

Val-Tyr-Ala-Asn-Gln-Thr-Pro-Pro-Ser-Lys-Ala-Arg (SEQ ID NO: 1)

Gln-Ser-Ser-Ile-Thr-Thr-Arg-Asn-Pro-Phe-Met-Thr (SEQ ID NO: 2)

Phe-Met-Asn-His-His-Pro-Asn-Ser-Gln-Gln-Tyr-His (SEQ ID NO: 3)

Gln-Tyr-Thr-Ser-Ser-Gly-Ile-Ile-Thr-Ser-Ser-Ala (SEQ ID NO: 4)

His-His-His-Pro-Glu-Asn-Leu-Asp-Ser-Thr-Phe-Gln (SEQ ID NO: 5)

Gln-Pro-His-Met-His-Arg-Ser-Ser-His-Gln-Asp-Gly (SEQ ID NO: 6)

Asn-Thr-Thr-Met-Gly-Pro-Met-Ser-Pro-His-Ser-Gln (SEQ ID NO: 7)

Ala-Ala-His-Phe-Glu-Pro-Gln-Thr-Met-Pro-Met-Ile (SEQ ID NO: 8)

Asp-His-Gln-Leu-His-Arg-Pro-Pro-His-Met-Met-Arg (SEQ ID NO: 9)

Val-Ser-Arg-His-Gln-Ser-Trp-His-Pro-His-Asp-Leu (SEQ ID NO: 10)

Met-Met-Gln-Arg-Asp-His-His-Gln-His-Asn-Ala-Gln (SEQ ID NO: 11)

Val-Thr-Leu-His-Thr-Val-Asp-His-Ala-Pro-Gln-Asp (SEQ ID NO: 12)

Ser-Val-Ser-Val-Gly-Met-Lys-Pro-Ser-Pro-Arg-Pro (SEQ ID NO: 13)

His-Leu-Gln-Ser-Met-Lys-Pro-Arg-Thr-His-Val-Leu (SEQ ID NO: 14)

Ile-Pro-Asn-Ala-Glu-Thr-Leu-Arg-Gln-Pro-Ala-Arg (SEQ ID NO: 15)

Val-Gly-Val-Ile-Ser-Ser-Trp-His-Pro-His-Asp-Leu (SEQ ID NO: 16)

Thr-Val-Pro-Ile-Tyr-Asn-Thr-Gly-Ile-Leu-Pro-Thr (SEQ ID NO: 17)

Tyr-Thr-Met-His-His-Gly-Ser-Thr-Phe-Met-Arg-Arg (SEQ ID NO: 18)

Ser-Met-Met-His-Val-Asn-Ile-Arg-Leu-Gly-Ile-Leu (SEQ ID NO: 19)

Ala-Pro-Met-His-His-Met-Lys-Ser-Leu-Tyr-Arg-Ala (SEQ ID NO: 20)

Met-Met-Gln-Arg-Asp-His-His-Gln-His-Met-Arg-Arg (SEQ ID NO: 21)

Met-Lys-Thr-His-His-Gly-Asn-Asn-Ala-Val-Phe-Leu (SEQ ID NO: 22)

Leu-Glu-Pro-Leu-Pro-His-Thr-Pro-Arg-Met-Tyr-Ala (SEQ ID NO: 23)

Gln-Leu-Tyr-Glu-Pro-Asp-Ser-Gly-Pro-Trp-Ala-Pro (SEQ ID NO: 24)

Trp-Met-Thr-Lys-Met-Pro-Thr-Thr-His-Thr-Arg-Tyr (SEQ ID NO: 25)

His-His-Pro-Met-Tyr-Ser-Met-Thr-Arg-Ala-Leu-Pro (SEQ ID NO: 26)

Gly-Ser-Ala-His-Ser-Arg-Asn-Asp-Ala-Ala-Pro-Val (SEQ ID NO: 27)

His-Ser-Pro-Leu-Met-Gln-Tyr-His-Met-Ser-Gly-Thr (SEQ ID NO: 28)

Thr-Ala-His-Met-Thr-Met-Pro-Ser-Arg-Phe-Leu-Pro (SEQ ID NO: 29)

Ala-Cys-Pro-Pro-Thr-Gln-Ser-Arg-Tyr-Cys (SEQ ID NO: 30)

Ala-Cys-Asn-Gly-Met-Leu-Ala-Phe-Gln-Cys (SEQ ID NO: 31)

Ala-Cys-Thr-Pro-Lys-Pro-Gly-Lys-His-Cys (SEQ ID NO: 32)

5. (Withdrawn) A kit according to claim 4,

wherein an amino acid sequence portion of any one of the amino acid sequences of SEQ ID NOS: 30 to 32 can form a cyclic structure with an intramolecular disulfide binding between Cys amino acid residues included therein.

6. (Withdrawn) A structure which is prepared by immobilizing an organic substance on a surface of a substrate, comprising:

the substrate having the surface at least part of which contains aluminum oxide; and

a binding domain for immobilizing the organic substance on the substrate, having an ability to bind to the aluminum oxide and being coupled with the organic substance, wherein:

the binding domain contains at least a peptide composed of one or more amino acids; and

the organic substance is immobilized on the surface of the substrate through the binding domain by means of specific binding of the peptide to the aluminum oxide.

7. (Withdrawn) A structure according to claim 6,
wherein the organic substance is a capturing molecule for capturing a target substance.

8. (Withdrawn) A structure according to claim 6,
wherein the organic substance comprises a converting molecule having a

function to convert a target substance.

9 to 10. (Cancelled)

11. (Withdrawn) A peptide, which has any one of at least one amino acid sequence selected from the group consisting of amino acid sequences of SEQ ID NOS: 1 to 32, an altered amino acid sequence obtained such that the amino acid sequence is subject to a deletion, substitution, or addition of one or more amino acids, and a complex amino acid sequence containing two or more of the amino acid sequences, and a repetitive sequence of the amino acid sequences, the amino acid sequence having an affinity to aluminum oxide.

Val-Tyr-Ala-Asn-Gln-Thr-Pro-Pro-Ser-Lys-Ala-Arg (SEQ ID NO: 1)

Gln-Ser-Ser-Ile-Thr-Thr-Arg-Asn-Pro-Phe-Met-Thr (SEQ ID NO: 2)

Phe-Met-Asn-His-His-Pro-Asn-Ser-Gln-Gln-Tyr-His (SEQ ID NO: 3)

Gln-Tyr-Thr-Ser-Ser-Gly-Ile-Ile-Thr-Ser-Ser-Ala (SEQ ID NO: 4)

His-His-His-Pro-Glu-Asn-Leu-Asp-Ser-Thr-Phe-Gln (SEQ ID NO: 5)

Gln-Pro-His-Met-His-Arg-Ser-Ser-His-Gln-Asp-Gly (SEQ ID NO: 6)

Asn-Thr-Thr-Met-Gly-Pro-Met-Ser-Pro-His-Ser-Gln (SEQ ID NO: 7)

Ala-Ala-His-Phe-Glu-Pro-Gln-Thr-Met-Pro-Met-Ile (SEQ ID NO: 8)

Asp-His-Gln-Leu-His-Arg-Pro-Pro-His-Met-Met-Arg (SEQ ID NO: 9)

Val-Ser-Arg-His-Gln-Ser-Trp-His-Pro-His-Asp-Leu (SEQ ID NO: 10)

Met-Met-Gln-Arg-Asp-His-His-Gln-His-Asn-Ala-Gln (SEQ ID NO: 11)

Val-Thr-Leu-His-Thr-Val-Asp-His-Ala-Pro-Gln-Asp (SEQ ID NO: 12)

Ser-Val-Ser-Val-Gly-Met-Lys-Pro-Ser-Pro-Arg-Pro (SEQ ID NO: 13)

His-Leu-Gln-Ser-Met-Lys-Pro-Arg-Thr-His-Val-Leu (SEQ ID NO: 14)

Ile-Pro-Asn-Ala-Glu-Thr-Leu-Arg-Gln-Pro-Ala-Arg (SEQ ID NO: 15)

Val-Gly-Val-Ile-Ser-Ser-Trp-His-Pro-His-Asp-Leu (SEQ ID NO: 16)

Thr-Val-Pro-Ile-Tyr-Asn-Thr-Gly-Ile-Leu-Pro-Thr (SEQ ID NO: 17)

Tyr-Thr-Met-His-His-Gly-Ser-Thr-Phe-Met-Arg-Arg (SEQ ID NO: 18)

Ser-Met-Met-His-Val-Asn-Ile-Arg-Leu-Gly-Ile-Leu (SEQ ID NO: 19)

Ala-Pro-Met-His-His-Met-Lys-Ser-Leu-Tyr-Arg-Ala (SEQ ID NO: 20)

Met-Met-Gln-Arg-Asp-His-His-Gln-His-Met-Arg-Arg (SEQ ID NO: 21)

Met-Lys-Thr-His-His-Gly-Asn-Asn-Ala-Val-Phe-Leu (SEQ ID NO: 22)

Leu-Glu-Pro-Leu-Pro-His-Thr-Pro-Arg-Met-Tyr-Ala (SEQ ID NO: 23)

Gln-Leu-Tyr-Glu-Pro-Asp-Ser-Gly-Pro-Trp-Ala-Pro (SEQ ID NO: 24)

Trp-Met-Thr-Lys-Met-Pro-Thr-Thr-His-Thr-Arg-Tyr (SEQ ID NO: 25)

His-His-Pro-Met-Tyr-Ser-Met-Thr-Arg-Ala-Leu-Pro (SEQ ID NO: 26)

Gly-Ser-Ala-His-Ser-Arg-Asn-Asp-Ala-Ala-Pro-Val (SEQ ID NO: 27)

His-Ser-Pro-Leu-Met-Gln-Tyr-His-Met-Ser-Gly-Thr (SEQ ID NO: 28)

Thr-Ala-His-Met-Thr-Met-Pro-Ser-Arg-Phe-Leu-Pro (SEQ ID NO: 29)

Ala-Cys-Pro-Pro-Thr-Gln-Ser-Arg-Tyr-Cys (SEQ ID NO: 30)

Ala-Cys-Asn-Gly-Met-Leu-Ala-Phe-Gln-Cys (SEQ ID NO: 31)

Ala-Cys-Thr-Pro-Lys-Pro-Gly-Lys-His-Cys (SEQ ID NO: 32)

12. (Withdrawn) A DNA molecule, which encodes a peptide chain,

the peptide chain having any one of at least one amino acid sequence selected from the group consisting of amino acid sequences of SEQ ID NOS: 1 to 32, an altered amino acid sequence obtained such that the amino acid sequence is subjected to a deletion, substitution, or addition of one or more amino acids, and a complex amino acid sequence containing two or more of the amino acid sequences, and a repetitive sequence of the amino acid sequences, the amino acid sequence having an affinity to aluminum oxide.

Val-Tyr-Ala-Asn-Gln-Thr-Pro-Pro-Ser-Lys-Ala-Arg (SEQ ID NO: 1)

Gln-Ser-Ser-Ile-Thr-Thr-Arg-Asn-Pro-Phe-Met-Thr (SEQ ID NO: 2)

Phe-Met-Asn-His-His-Pro-Asn-Ser-Gln-Gln-Tyr-His (SEQ ID NO: 3)

Gln-Tyr-Thr-Ser-Ser-Gly-Ile-Ile-Thr-Ser-Ser-Ala (SEQ ID NO: 4)

His-His-His-Pro-Glu-Asn-Leu-Asp-Ser-Thr-Phe-Gln (SEQ ID NO: 5)

Gln-Pro-His-Met-His-Arg-Ser-Ser-His-Gln-Asp-Gly (SEQ ID NO: 6)

Asn-Thr-Thr-Met-Gly-Pro-Met-Ser-Pro-His-Ser-Gln (SEQ ID NO: 7)

Ala-Ala-His-Phe-Glu-Pro-Gln-Thr-Met-Pro-Met-Ile (SEQ ID NO: 8)

Asp-His-Gln-Leu-His-Arg-Pro-Pro-His-Met-Met-Arg (SEQ ID NO: 9)

Val-Ser-Arg-His-Gln-Ser-Trp-His-Pro-His-Asp-Leu (SEQ ID NO: 10)

Met-Met-Gln-Arg-Asp-His-His-Gln-His-Asn-Ala-Gln (SEQ ID NO: 11)

Val-Thr-Leu-His-Thr-Val-Asp-His-Ala-Pro-Gln-Asp (SEQ ID NO: 12)

Ser-Val-Ser-Val-Gly-Met-Lys-Pro-Ser-Pro-Arg-Pro (SEQ ID NO: 13)

His-Leu-Gln-Ser-Met-Lys-Pro-Arg-Thr-His-Val-Leu (SEQ ID NO: 14)

Ile-Pro-Asn-Ala-Glu-Thr-Leu-Arg-Gln-Pro-Ala-Arg (SEQ ID NO: 15)

Val-Gly-Val-Ile-Ser-Ser-Trp-His-Pro-His-Asp-Leu (SEQ ID NO: 16)

Thr-Val-Pro-Ile-Tyr-Asn-Thr-Gly-Ile-Leu-Pro-Thr (SEQ ID NO: 17)

Tyr-Thr-Met-His-His-Gly-Ser-Thr-Phe-Met-Arg-Arg (SEQ ID NO: 18)

Ser-Met-Met-His-Val-Asn-Ile-Arg-Leu-Gly-Ile-Leu (SEQ ID NO: 19)

Ala-Pro-Met-His-His-Met-Lys-Ser-Leu-Tyr-Arg-Ala (SEQ ID NO: 20)

Met-Met-Gln-Arg-Asp-His-His-Gln-His-Met-Arg-Arg (SEQ ID NO: 21)

Met-Lys-Thr-His-His-Gly-Asn-Asn-Ala-Val-Phe-Leu (SEQ ID NO: 22)

Leu-Glu-Pro-Leu-Pro-His-Thr-Pro-Arg-Met-Tyr-Ala (SEQ ID NO: 23)

Gln-Leu-Tyr-Glu-Pro-Asp-Ser-Gly-Pro-Trp-Ala-Pro (SEQ ID NO: 24)

Trp-Met-Thr-Lys-Met-Pro-Thr-Thr-His-Thr-Arg-Tyr (SEQ ID NO: 25)

His-His-Pro-Met-Tyr-Ser-Met-Thr-Arg-Ala-Leu-Pro (SEQ ID NO: 26)

Gly-Ser-Ala-His-Ser-Arg-Asn-Asp-Ala-Ala-Pro-Val (SEQ ID NO: 27)

His-Ser-Pro-Leu-Met-Gln-Tyr-His-Met-Ser-Gly-Thr (SEQ ID NO: 28)

Thr-Ala-His-Met-Thr-Met-Pro-Ser-Arg-Phe-Leu-Pro (SEQ ID NO: 29)

Ala-Cys-Pro-Pro-Thr-Gln-Ser-Arg-Tyr-Cys (SEQ ID NO: 30)

Ala-Cys-Asn-Gly-Met-Leu-Ala-Phe-Gln-Cys (SEQ ID NO: 31)

Ala-Cys-Thr-Pro-Lys-Pro-Gly-Lys-His-Cys (SEQ ID NO: 32)

13. (Withdrawn) An expression vector, which has an ability to express an organic substance - binding domain fused product comprised of an organic substance containing a protein in at least part thereof and a binding domain having an ability to bind to aluminum oxide in a host cell,

the binding domain containing a peptide comprised of at least one or more

amino acids,

the peptide containing any one of at least one amino acid sequence selected from the group consisting of amino acid sequences of SEQ ID NOS: 1 to 32, an altered amino acid sequence obtained such that the amino acid sequence is subjected to a deletion, substitution, or addition of one or more amino acids, and a complex amino acid sequence containing two or more of the amino acid sequences, and a repetitive sequence of the amino acid sequences.

Val-Tyr-Ala-Asn-Gln-Thr-Pro-Pro-Ser-Lys-Ala-Arg (SEQ ID NO: 1)

Gln-Ser-Ser-Ile-Thr-Thr-Arg-Asn-Pro-Phe-Met-Thr (SEQ ID NO: 2)

Phe-Met-Asn-His-His-Pro-Asn-Ser-Gln-Gln-Tyr-His (SEQ ID NO: 3)

Gln-Tyr-Thr-Ser-Ser-Gly-Ile-Ile-Thr-Ser-Ser-Ala (SEQ ID NO: 4)

His-His-His-Pro-Glu-Asn-Leu-Asp-Ser-Thr-Phe-Gln (SEQ ID NO: 5)

Gln-Pro-His-Met-His-Arg-Ser-Ser-His-Gln-Asp-Gly (SEQ ID NO: 6)

Asn-Thr-Thr-Met-Gly-Pro-Met-Ser-Pro-His-Ser-Gln (SEQ ID NO: 7)

Ala-Ala-His-Phe-Glu-Pro-Gln-Thr-Met-Pro-Met-Ile (SEQ ID NO: 8)

Asp-His-Gln-Leu-His-Arg-Pro-Pro-His-Met-Met-Arg (SEQ ID NO: 9)

Val-Ser-Arg-His-Gln-Ser-Trp-His-Pro-His-Asp-Leu (SEQ ID NO: 10)

Met-Met-Gln-Arg-Asp-His-His-Gln-His-Asn-Ala-Gln (SEQ ID NO: 11)

Val-Thr-Leu-His-Thr-Val-Asp-His-Ala-Pro-Gln-Asp (SEQ ID NO: 12)

Ser-Val-Ser-Val-Gly-Met-Lys-Pro-Ser-Pro-Arg-Pro (SEQ ID NO: 13)

His-Leu-Gln-Ser-Met-Lys-Pro-Arg-Thr-His-Val-Leu (SEQ ID NO: 14)

Ile-Pro-Asn-Ala-Glu-Thr-Leu-Arg-Gln-Pro-Ala-Arg (SEQ ID NO: 15)

Val-Gly-Val-Ile-Ser-Ser-Trp-His-Pro-His-Asp-Leu (SEQ ID NO: 16)

Thr-Val-Pro-Ile-Tyr-Asn-Thr-Gly-Ile-Leu-Pro-Thr (SEQ ID NO: 17)

Tyr-Thr-Met-His-His-Gly-Ser-Thr-Phe-Met-Arg-Arg (SEQ ID NO: 18)

Ser-Met-Met-His-Val-Asn-Ile-Arg-Leu-Gly-Ile-Leu (SEQ ID NO: 19)

Ala-Pro-Met-His-His-Met-Lys-Ser-Leu-Tyr-Arg-Ala (SEQ ID NO: 20)

Met-Met-Gln-Arg-Asp-His-His-Gln-His-Met-Arg-Arg (SEQ ID NO: 21)

Met-Lys-Thr-His-His-Gly-Asn-Asn-Ala-Val-Phe-Leu (SEQ ID NO: 22)

Leu-Glu-Pro-Leu-Pro-His-Thr-Pro-Arg-Met-Tyr-Ala (SEQ ID NO: 23)

Gln-Leu-Tyr-Glu-Pro-Asp-Ser-Gly-Pro-Trp-Ala-Pro (SEQ ID NO: 24)

Trp-Met-Thr-Lys-Met-Pro-Thr-Thr-His-Thr-Arg-Tyr (SEQ ID NO: 25)

His-His-Pro-Met-Tyr-Ser-Met-Thr-Arg-Ala-Leu-Pro (SEQ ID NO: 26)

Gly-Ser-Ala-His-Ser-Arg-Asn-Asp-Ala-Ala-Pro-Val (SEQ ID NO: 27)

His-Ser-Pro-Leu-Met-Gln-Tyr-His-Met-Ser-Gly-Thr (SEQ ID NO: 28)

Thr-Ala-His-Met-Thr-Met-Pro-Ser-Arg-Phe-Leu-Pro (SEQ ID NO: 29)

Ala-Cys-Pro-Pro-Thr-Gln-Ser-Arg-Tyr-Cys (SEQ ID NO: 30)

Ala-Cys-Asn-Gly-Met-Leu-Ala-Phe-Gln-Cys (SEQ ID NO: 31)

Ala-Cys-Thr-Pro-Lys-Pro-Gly-Lys-His-Cys (SEQ ID NO: 32)

14. (Withdrawn) An organic substance- binding domain fused product comprising an organic substance and a binding domain having an ability to bind to aluminum oxide,

the binding domain containing a peptide comprised of at least one or more

amino acids,

the peptide containing any one of at least one amino acid sequence selected from the group consisting of amino acid sequences of SEQ ID NOS: 1 to 32, an altered amino acid sequence obtained such that the amino acid sequence is subjected to a deletion, substitution, or addition of one or more amino acids, and a complex amino acid sequence containing two or more of the amino acid sequences, and a repetitive sequence of the amino acid sequences.

Val-Tyr-Ala-Asn-Gln-Thr-Pro-Pro-Ser-Lys-Ala-Arg (SEQ ID NO: 1)

Gln-Ser-Ser-Ile-Thr-Thr-Arg-Asn-Pro-Phe-Met-Thr (SEQ ID NO: 2)

Phe-Met-Asn-His-His-Pro-Asn-Ser-Gln-Gln-Tyr-His (SEQ ID NO: 3)

Gln-Tyr-Thr-Ser-Ser-Gly-Ile-Ile-Thr-Ser-Ser-Ala (SEQ ID NO: 4)

His-His-His-Pro-Glu-Asn-Leu-Asp-Ser-Thr-Phe-Gln (SEQ ID NO: 5)

Gln-Pro-His-Met-His-Arg-Ser-Ser-His-Gln-Asp-Gly (SEQ ID NO: 6)

Asn-Thr-Thr-Met-Gly-Pro-Met-Ser-Pro-His-Ser-Gln (SEQ ID NO: 7)

Ala-Ala-His-Phe-Glu-Pro-Gln-Thr-Met-Pro-Met-Ile (SEQ ID NO: 8)

Asp-His-Gln-Leu-His-Arg-Pro-Pro-His-Met-Met-Arg (SEQ ID NO: 9)

Val-Ser-Arg-His-Gln-Ser-Trp-His-Pro-His-Asp-Leu (SEQ ID NO: 10)

Met-Met-Gln-Arg-Asp-His-His-Gln-His-Asn-Ala-Gln (SEQ ID NO: 11)

Val-Thr-Leu-His-Thr-Val-Asp-His-Ala-Pro-Gln-Asp (SEQ ID NO: 12)

Ser-Val-Ser-Val-Gly-Met-Lys-Pro-Ser-Pro-Arg-Pro (SEQ ID NO: 13)

His-Leu-Gln-Ser-Met-Lys-Pro-Arg-Thr-His-Val-Leu (SEQ ID NO: 14)

Ile-Pro-Asn-Ala-Glu-Thr-Leu-Arg-Gln-Pro-Ala-Arg (SEQ ID NO: 15)

Val-Gly-Val-Ile-Ser-Ser-Trp-His-Pro-His-Asp-Leu (SEQ ID NO: 16)

Thr-Val-Pro-Ile-Tyr-Asn-Thr-Gly-Ile-Leu-Pro-Thr (SEQ ID NO: 17)

Tyr-Thr-Met-His-His-Gly-Ser-Thr-Phe-Met-Arg-Arg (SEQ ID NO: 18)

Ser-Met-Met-His-Val-Asn-Ile-Arg-Leu-Gly-Ile-Leu (SEQ ID NO: 19)

Ala-Pro-Met-His-His-Met-Lys-Ser-Leu-Tyr-Arg-Ala (SEQ ID NO: 20)

Met-Met-Gln-Arg-Asp-His-His-Gln-His-Met-Arg-Arg (SEQ ID NO: 21)

Met-Lys-Thr-His-His-Gly-Asn-Asn-Ala-Val-Phe-Leu (SEQ ID NO: 22)

Leu-Glu-Pro-Leu-Pro-His-Thr-Pro-Arg-Met-Tyr-Ala (SEQ ID NO: 23)

Gln-Leu-Tyr-Glu-Pro-Asp-Ser-Gly-Pro-Trp-Ala-Pro (SEQ ID NO: 24)

Trp-Met-Thr-Lys-Met-Pro-Thr-Thr-His-Thr-Arg-Tyr (SEQ ID NO: 25)

His-His-Pro-Met-Tyr-Ser-Met-Thr-Arg-Ala-Leu-Pro (SEQ ID NO: 26)

Gly-Ser-Ala-His-Ser-Arg-Asn-Asp-Ala-Ala-Pro-Val (SEQ ID NO: 27)

His-Ser-Pro-Leu-Met-Gln-Tyr-His-Met-Ser-Gly-Thr (SEQ ID NO: 28)

Thr-Ala-His-Met-Thr-Met-Pro-Ser-Arg-Phe-Leu-Pro (SEQ ID NO: 29)

Ala-Cys-Pro-Pro-Thr-Gln-Ser-Arg-Tyr-Cys (SEQ ID NO: 30)

Ala-Cys-Asn-Gly-Met-Leu-Ala-Phe-Gln-Cys (SEQ ID NO: 31)

Ala-Cys-Thr-Pro-Lys-Pro-Gly-Lys-His-Cys (SEQ ID NO: 32)

15. (New) A method of manufacturing a structure which comprises a protein and a substrate comprising the steps of:

preparing a substrate having a surface at least part of which contains aluminum oxide;

preparing a protein comprising the amino acid sequence of SEQ ID NO: 1 or SEQ ID NO: 30 and having an ability to bind to the aluminum oxide; and

bringing the protein into contact with the surface of the substrate to obtain the structure which comprises the protein and the substrate.